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| 10/603,925 | 06/24/2003 | Basil Treppa | 50072.55US01/NC28807 | 4336 |
| 38879 | 7590 | 07/24/2006 | EXAMINER | |
| DARBY & DARBY P.C. P.O. BOX 5257 NEW YORK, NY 10150-6257 | | | MABINI, MARVIN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2195 | |

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,925

Applicant(s)

TREPPA ET AL.

Examiner

Marvin Mabini

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20060407.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 14 and 21 are objected to because of the following informalities: The term "operations" in claims 14 and 21 is interpreted to refer to network management (NM) operations. Examiner respectfully suggests that the term "operations" in claims 14 and 21 be replaced by "network management (NM) operations" so that the wording of the dependent claims will be unambiguous.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 18-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 18-23 do not fall within any of the four statutory classes of 35 U.S.C 101 because the computer readable medium is defined as a communication media such as a carrier wave or signal (see application specification paragraph 78).

The United States Patent and Trademark office OG Notices: 22 November 2005 states a claimed signal is clearly not a "process" under § 101 because it is not a series of steps. A claimed signal has no physical structure, does not itself perform any useful,

Art Unit: 2195

concrete and tangible result and, thus, does not fit within the definition of a machine. A claimed signal is not matter, but a form of energy, and therefore is not a composition of matter. A signal, a form of energy, does not fall within either of the two definitions of manufacture.

The computer readable medium must be a physical structure, which provides the computer program in usable form to permit its functionality to be realized with the computer.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4,6,9,11-14,17,18,20-21,23,24, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by US Publication 2003/0214525 to Esfahany (hereinafter "Esfahany").

As per claim 1,

Esfahany discloses a system for cluster management (see Esfahany abstract) that allows the configuration and monitoring (see Esfahany abstract) of a cluster from a single-point (see block 1000 figure 5 Esfahany), comprising: a network interface configured to communicate with nodes in the cluster (see network interface block 112 figure 1 Esfahany); a memory configured to store information relating to cluster management (see memory block 104 Figure 1 Esfahany); a configuration subsystem coupled to a remote management broker (see figure 4 block 402 Esfahany, also see cluster detector and cluster supervisor- Esfahany paragraph 37), wherein the remote management broker is configured to distribute information between the nodes in the cluster (see block 400 figure 4, also see interacting with heterogeneous cluster - Esfahany paragraph 37); a processor configured to perform actions (see processor block 102 figure 1, also see processor - Esfahany paragraph 23), including: accessing the cluster from the single-point (see access to cluster manager - Esfahany paragraph 62); obtaining information relating to devices within the cluster (see access a cluster - Esfahany paragraph 62); presenting the information to a user (see interface - Esfahany paragraph 63); and determining network management (NM) operations to perform to the cluster (see identifying cluster related objects - Esfahany paragraph 63); and performing the determined NM operations (see invoking a process - Esfahany paragraph 64).

As per claim 2,

Art Unit: 2195

Esfahany discloses presenting the information to the user, further comprises a command line interface configured to access the cluster (see command set - Esfahany paragraph 41).

As per claim 3,

Esfahany discloses presenting the information to the user, further comprises a graphical user interface configured to access the cluster (see graphical user interface - Esfahany paragraph 9).

As per claim 4,

Esfahany discloses an aggregator configured to aggregate data relating to the devices within the cluster (see cluster supervisor can collect data from one or more clusters - Esfahany paragraph 7 and 37).

As per claim 6,

Esfahany discloses the system of claim 1, wherein the RMB is further configured to collect attributes from the Configuration Subsystem (see received data values from cluster manager – Esfahany paragraph 62).

As per claim 9,

Esfahany discloses a method for providing cluster management that allows the configuration and monitoring (see Esfahany abstract) of a cluster from a single-point

Art Unit: 2195

(see block 1000 figure 5 Esfahany), comprising: accessing the cluster from the single-point (see block 1000 figure 5 Esfahany) ; obtaining attributes relating to devices within the cluster (see received data values from cluster manager – Esfahany paragraph 62); receiving input from a user relating to the attributes (see API provide data values to the cluster manager – see Esfahany paragraph 62); determining network management (NM) operations to perform on the cluster based on the received input (see identifying cluster related objects - Esfahany paragraph 63); and performing the determined NM operations on the cluster (see invoking a process - Esfahany paragraph 64).

As per claim 11,

Esfahany discloses the single-point is selected from a command line interface (see command set - Esfahany paragraph 41) and a graphical user interface (see graphical user interface - Esfahany paragraph 9).

As per claim 12,

Esfahany discloses distributing information between the nodes in the cluster using a remote management broker (see block 400 figure 4, also see interacting with heterogeneous cluster - Esfahany paragraph 37).

As per claim 13,

Esfahany discloses performing the determined NM operations on the cluster further comprise distributing the NM operations to each of the devices (see identifying

Art Unit: 2195

cluster related objects - Esfahany paragraph 63, also see invoking a process and sending commands to cluster- Esfahany paragraph 64).

As per claim 14,

Esfahany discloses determining if the operations on the cluster were performed correctly, and if not, rolling back to a successful configuration (see reestablishing a lost state - Esfahany paragraph 37).

As per claim 17,

Esfahany discloses aggregating data relating to the devices within the cluster on a single device within the cluster (see cluster supervisor can collect data from one or more clusters - Esfahany paragraph 7 and 37).

As per claim 18,

Esfahany discloses a computer readable medium for cluster management (see Esfahany abstract), comprising: obtaining attributes relating to devices (see cluster supervisor collect data from clusters - Esfahany paragraph 37) within a cluster from a single-point (see block 1000 figure 5 Esfahany); receiving input relating to the attributes (see received data values from cluster manager – Esfahany paragraph 62); determining network management (NM) operations to perform on the cluster based on the received input (see identifying cluster related objects - Esfahany paragraph 63); distributing the NM operations to the devices within the (see identifying cluster related objects -

Art Unit: 2195

Esfahany paragraph 63, also see sending commands to cluster- Esfahany paragraph 64); and applying the NM operations (see invoking a process and control data - Esfahany paragraph 64).

As per claim 20,

Esfahany discloses receiving the input further comprises utilizing a command line interface (see command set - Esfahany paragraph 41) and a graphical user interface (see graphical user interface - Esfahany paragraph 9).

As per claim 21,

Esfahany discloses determining if the operations on the cluster were applied correctly, and if not, rolling back to a successful configuration (see reestablishing a lost state - Esfahany paragraph 37).

As per claim 23,

Esfahany discloses aggregating data relating to the devices within the cluster on a single device within the cluster (see cluster supervisor can collect data from one or more clusters - Esfahany paragraph 7 and 37).

As per claim 24,

Esfahany discloses an apparatus for cluster management (see Esfahany abstract), comprising: means for obtaining attributes relating to devices within a cluster

Art Unit: 2195

(see cluster supervisor collect data from clusters - Esfahany paragraph 37) from a single-point (see block 1000 figure 5 Esfahany); means for receiving input relating to the attributes (see received data values from cluster manager – Esfahany paragraph 62); means for determining network management (NM) operations to perform on the cluster based on the received input (see identifying cluster related objects - Esfahany paragraph 63); means for distributing the NM operations to the devices within the cluster (see identifying cluster related objects - Esfahany paragraph 63, also see sending commands to cluster- Esfahany paragraph 64); and means for applying the NM operations to the devices within the cluster (see invoking a process and control data - Esfahany paragraph 64).

As per claim 26,

Esfahany discloses means for determining if the operations on the cluster were applied correctly, and if not, rolling back to a successful configuration (see reestablishing a lost state - Esfahany paragraph 37).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 7-8, 10, 15-16, 19, 22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication 2003/0214525 to Esfahany (hereinafter "Esfahany") in view of 2002/0152305 to Jackson et al. (hereinafter "Jackson").

As per claim 5,

Esfahany discloses all the limitations of claim 5 (see 102 rejection above of claim 1 from which claim 5 depends)

Esfahany does not disclose expressly the RMB further comprises: a secure transport configured to transport messages; an RMB server coupled to the secure transport; and an RMB client coupled to the secure transport.

Jackson teaches the RMB further comprises: a secure transport configured to transport messages (see secure port - Jackson paragraph 130); an RMB server coupled to the secure transport; and an RMB client coupled to the secure transport (see management utilize secure port - Jackson paragraph 130).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the system of Esfahany with a secure transport configured to transport messages an RMB server coupled to the secure transport; and an RMB client coupled to the secure transport as taught by Jackson. The motivation for adding a secure transport configured to transport messages; an RMB server coupled to the secure transport; and an RMB client coupled to the secure transport would have been to provide an interconnect such that information or content delivery will be protected or

Art Unit: 2195

secured (see Jackson paragraph 130). Therefore it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claim 5.

As per claims 7 and 8.

Esfahany discloses all the limitations of claim 7 and 8 (see 102 rejection above of claim 1 from which claims 7 and 8 depends)

With respect to claim 7,

Esfahany does not disclose expressly the messages include a header, which is configured to authenticate the messages.

Jackson teaches the messages include a header, which is configured to authenticate the messages (see message header to interpret and process message - Jackson paragraph 160).

With respect to claim 8,

Esfahany does not disclose expressly the header includes a message authentication code that acts as a shared secret within the cluster and a magic field that identifies the message as a remote management broker message.

Jackson teaches the header includes a message authentication code that acts as a shared secret within the cluster (see message header and specific functional entities have there own message classes - Jackson paragraph 160) and a magic field (fields of message head include qualifier fields - Jackson paragraph 160) that identifies the message as a remote management broker message (see management and control using the messaging capabilities - Jackson paragraph 160).

Art Unit: 2195

At the time of the invention it would have been obvious to one of ordinary skill in the art to provide the messages of Esfahany with a header, which is configured to authenticate the messages; the header includes a message authentication code that acts as a shared secret within the cluster and a magic field that identifies the message as a remote management broker message as taught by Jackson.

With respect to claim 7, the motivation to add messages to include a header, which is configured to authenticate the messages to Esfahany would be so that the messages be interpreted and process efficiently and intelligently (Jackson paragraph 160).

With respect to claim 8, the motivation to add that the header includes a message authentication code that acts as a shared secret within the cluster and a magic field that identifies the message as a remote management broker message to Esfahany, would be so that overall system performance be improved by speeding the communication of messages (Jackson paragraph 161).

Therefore, it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claims 7 and 8.

As per claims 10 and 16,

Esfahany discloses all the limitations of claims 10 and 16 (see 102 rejection above of claim 9 from which claims 10 and 16 depends).

With respect to claim 10,

Art Unit: 2195

Esfahany does not disclose applying a configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster.

Jackson teaches applying a configuration lock (see poll system – Jackson paragraph 260) that is intended to prevent other applications from performing NM operations on the devices within the cluster (see determining if resources are available and rejecting request if necessary resources are reserved - Jackson paragraph 260).

With respect to claim 16,

Esfahany does not disclose releasing the configuration lock after the NM operations are performed.

Jackson teaches releasing the configuration lock (see poll system – Jackson paragraph 260) after the NM operations are performed (see determining if resources are available and request is subsequently processed - Jackson paragraph 260).

At the time of the invention it would have been obvious to one of ordinary skill in to modify the system of Esfahany with a configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster; and releasing the configuration lock after the NM operations are performed as taught by Jackson.

With respect to claim 10, the motivation to add applying a configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster to Esfahany would be to reduce conflicts when necessary are resources are in use (Jackson paragraph 260).

Art Unit: 2195

With respect to claim 16, the motivation to add releasing the configuration lock after the NM operations are performed would be so that resources can be effectively utilized when the needed resources are available.

Therefore it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claims 10 and 16.

As per claim 15,

Esfahany discloses all the limitations of claim 15 (see 102 rejection above of claim 9 from which claim 15 depends).

Esfahany does not disclose utilizing a header, which is configured to authenticate the messages.

Jackson teaches utilizing a header, which is configured to authenticate the messages (see message header to interpret and process message - Jackson paragraph 160).

At the time of the invention it would have been obvious to one of ordinary skill in the art modify the system of Esfahany with utilizing a header, which is configured to authenticate the messages as taught by Jackson. The motivation to add utilizing a header, which is configured to authenticate the messages to Esfahany, would be so that the messages be interpreted and process efficiently and intelligently (Jackson paragraph 160).

Therefore it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claim 15.

As per claim 19,

Esfahany discloses all the limitations of claim 19 (see 102 rejection above of claim 18 from which claim 19 depends).

Esfahany does not disclose applying a configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time.

Jackson teaches applying a configuration lock (see poll system – Jackson paragraph 260) that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time (see determining if resources are available to process request and rejecting request if not, else the necessary resources are reserved and the request is subsequently processed. - Jackson paragraph 260). The statement “request is subsequently processed” is interpreted as a lock is performed for predetermined amount of time.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the system of Esfahany with configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time as taught by Jackson. The motivation to add configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time would be to reduce conflicts when necessary are resources are in use and to perform the NM operations without delay when the predetermined time has passed (Jackson paragraph

Art Unit: 2195

260). Therefore it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claim 19.

As per claim 22,

Esfahany discloses all the limitations of claim 22 (see 102 rejection above of claim 18 from which claim 22 depends).

Esfahany does not disclose providing a header, which is configured to help in authenticating the messages.

Jackson teaches providing a header, which is configured to help in authenticating the messages (see message header to interpret and process message - Jackson paragraph 160).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the system of Esfahany with a header, which is configured to help in authenticating the messages as taught by Jackson. The motivation to add providing a header which is configured to help in authenticating the messages to Esfahany, would be so that the messages be interpreted and process efficiently and intelligently (Jackson paragraph 160).

Therefore it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claim 22.

As per claim 25,

Esfahany discloses all the limitations of claim 25 (see 102 rejection above of claim 24 from which claim 25 depends).

Esfahany does not disclose applying a configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time.

Jackson teaches applying a configuration lock (see poll system – Jackson paragraph 260) that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time (see determining if resources are available to process request and rejecting request if not, else the necessary resources are reserved and the request is subsequently processed. - Jackson paragraph 260). The statement “request is subsequently processed” is interpreted as a lock is performed for predetermined amount of time.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify the system of Esfahany with a configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time as taught by Jackson. The motivation to add configuration lock that is intended to prevent other applications from performing NM operations on the devices within the cluster during a predetermined time would be to reduce conflicts when necessary are resources are in use and to perform the NM operations without delay when the predetermined time has passed (Jackson paragraph 260). Therefore it would have been obvious to combine Esfahany and Jackson to obtain the invention as specified in claim 25.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6339750 to Hoyer et al, teaches a graphical display for managing clusters.

US Patent 6532494 to Frank et al, teaches messaging in a cluster manager.

US Patent 6151688 to Wipfel et al, teaches managing clusters with locks being utilized.

US Patent 7039694 to Kampe et al, teaches monitoring cluster members, where the status of each node is monitored.

US Patent 6801949 to Bruck et al, teaches a graphical user interface or command line for operating a cluster manager.

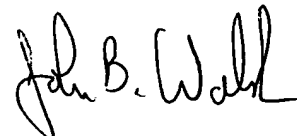
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin Mabini whose telephone number is 571-270-1142. The examiner can normally be reached on Monday-Friday 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2195

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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